

# **Boston Logan International Airport Plans to Improve Operational Efficiency**

## **Current Situation:**

- Boston was the 5<sup>th</sup> most delayed airport in the U.S. in 2000 (based on FAA OPSNET reported delays).
- Boston's current scheduled traffic can be handled efficiently during good-weather conditions, but scheduled traffic exceeds adverse-weather capacity for 8 hours of the day.
- Scheduled traffic exceeds VFR capacity during northwest winds (this occurs during a third of the year).
- On adverse weather days, about 12 percent of the flights are delayed significantly (more than 15 minutes) versus 4 percent on good weather days.

**NOTE:** Delays of 15 minutes or more as reported in FAA OPSNET System.

## **Future Demand:**

- Demand is forecast to grow by 6 percent over the next 10 years.  
(Source: The FAA 2000 Terminal Area Forecast. Demand is defined as total number of operations).

## **Planned Improvements:**

- Airport construction will reduce delays on the airport surface and may add to airside capacity
  - New runway in 2005 will not affect the Boston capacity benchmarks but will help mitigate delays currently encountered during adverse wind conditions when the airport is currently reduced to a dual or a single runway operation.
  - Terminal construction will reduce gate contention delays.
  - Additional taxiways and high-speed turnoffs will improve runway utilization and may thereby minimally improve airside capacity.
- Procedure, airspace, and technology improvements are expected to improve good-weather and adverse-weather capacity by 4 percent over the next 10 years.
  - Improved arrival and departure procedures are expected to improve efficiency FMS/RNAV routes, improved STARs and DPs and SOIA/PRM).

**NOTE:** The agency recognizes that **PRM** equipment may be utilized to support simultaneous offset instrument approaches to increase capacity. These SOIA approaches can only be utilized after specific safety analysis for proposed procedures and subsequent commitment by users to train and execute these approaches.

- Use of LAHSO will increase capacity under some runway configurations.

**NOTE:** The loss of **LAHSO** in 1999 at BOS resulted in a reduction of 8 arrivals and departures per hour in one of the most commonly used runway configurations.

- Choke Point action items are expected to provide more efficient flows, greater access to overhead streams, and additional terminal airspace capacity.
- FFP1 and FFP2 capabilities will increase terminal airspace capacity and efficiency (TMA).
- Avionics improvements and the associated procedures are expected to improve situational awareness thus enhancing safety and improving terminal airspace capacity (ADS-B/CDTI with LAAS).

**Other Potential Considerations:**

- MASSPORT, airlines and FAA worked together on an Airport Design Team Study/Capacity Enhancement Plan (CEP) published in 1992. This study examined the delay reduction potential of additional runway and related infrastructure improvements. An updated examination of the airfield, procedural and air traffic related options associated with delay reduction would provide decisions makers with useful technical information.
- Conduct a regional system analysis to investigate other regional airports and intermodal strategies.
- All airlines should examine their individual scheduling practices.